cb

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/530,843B
Source: PCT
Date Processed by STIC: 07/03/2006

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):** U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

PCT

RAW SEQUENCE LISTING DATE: 07/03/2006
PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:52

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

Does Not Comply
Corrected Diskette Needed
(Pg-5)

```
      3 <110> APPLICANT: Consortium fuer elektrochemische Industrie GmbH
      5 <120> TITLE OF INVENTION: Feedback-resistant Homoserine-Transsuccinylases
      7 <130> FILE REFERENCE: CO-P#######
C-->  9 <140> CURRENT APPLICATION NUMBER: US/10/530,843B
C--> 10 <141> CURRENT FILING DATE: 2005-04-08
     12 <160> NUMBER OF SEQ ID NOS: 12
     14 <170> SOFTWARE: PatentIn Ver. 2.0
     16 <210> SEQ ID NO: 1
     17 <211> LENGTH: 930
     18 <212> TYPE: DNA
     19 <213> ORGANISM: Escherichia coli
     21 <220> FEATURE:
     22 <221> NAME/KEY: CDS
     23 <222> LOCATION: (1)..(930)
     25 <300> PUBLICATION INFORMATION:
     26 <301> AUTHORs: Blattner, F. R.
     27 <302> TITLE: The complete genome sequence of Escherichia coli K-12.
     28 <303> JOURNAL: Science
     29 <304> VOLUME: 277
     30 <305> ISSUE: 5331
     31 <306> PAGES: 1453-1474
     32 <307> DATE: 1997
     34 <400> SEQUENCE: 1
     35  atg ccg att cgt gtg ccg gac gag cta ccc gcc gtc aat ttc ttg cgt   48
     36  Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
     37    1               5                  10                  15
     39  gaa gaa aac gtc ttt gtg atg aca act tct cgt gcg tct ggt cag gaa   96
     40  Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
     41               20                  25                  30
     43  att cgt cca ctt aag gtt ctg atc ctt aac ctg atg ccg aag aag att   144
     44  Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
     45           35                  40                  45
     47  gaa act gaa aat cag ttt ctg cgc ctg ctt tca aac tca cct ttg cag   192
     48  Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
     49       50                  55                  60
     51  gtc gat att cag ctg ttg cgc atc gat tcc cgt gaa tcg cgc aac acg   240
     52  Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
     53   65                  70                  75                  80
     55  ccc gca gag cat ctg aac aac ttc tac tgt aac ttt gaa gat att cag   288
     56  Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
     57                  85                  90                  95
     59  gat cag aac ttt gac ggt ttg att gta act ggt gcg ccg ctg ggc ctg   336
     60  Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu
```

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PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:52

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

```
61                 100                 105                 110
63  gtg gag ttt aat gat gtc gct tac tgg ccg cag atc aaa cag gtg ctg   384
64  Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
65          115                 120                 125
67  gag tgg tcg aaa gat cac gtc acc tcg acg ctg ttt gtc tgc tgg gcg   432
68  Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
69      130                 135                 140
71  gta cag gcc gcg ctc aat atc ctc tac ggc att cct aag caa act cgc   480
72  Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
73  145                 150                 155                 160
75  acc gaa aaa ctc tct ggc gtt tac gag cat cat att ctc cat cct cat   528
76  Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
77                  165                 170                 175
79  gcg ctt ctg acg cgt ggc ttt gat gat tca ttc ctg gca ccg cat tcg   576
80  Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
81                  180                 185                 190
83  cgc tat gct gac ttt ccg gca gcg ttg att cgt gat tac acc gat ctg   624
84  Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
85          195                 200                 205
87  gaa att ctg gca gag acg gaa gaa ggg gat gca tat ctg ttt gcc agt   672
88  Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
89      210                 215                 220
91  aaa gat aag cgc att gcc ttt gtg acg ggc cat ccc gaa tat gat gcg   720
92  Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
93  225                 230                 235                 240
95  caa acg ctg gcg cag gaa ttt ttc cgc gat gtg gaa gcc gga cta gac   768
96  Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
97                  245                 250                 255
99  ccg gat gta ccg tat aac tat ttc ccg cac aat gat ccg caa aat aca   816
100  Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
101             260                 265                 270
103  ccg cga gcg agc tgg cgt agt cac ggt aat tta ctg ttt acc aac tgg   864
104  Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
105         275                 280                 285
107  ctc aac tat tac gtc tac cag atc acg cca tac gat cta cgg cac atg   912
108  Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
109      290                 295                 300
111  aat cca acg ctg gat taa                                        930
112  Asn Pro Thr Leu Asp
113  305
116 <210> SEQ ID NO: 2
117 <211> LENGTH: 309
118 <212> TYPE: PRT
119 <213> ORGANISM: Escherichia coli
121 <400> SEQUENCE: 2
122  Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
123    1               5                  10                  15
125  Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
126              20                  25                  30
```

RAW SEQUENCE LISTING DATE: 07/03/2006
PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:52

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

```
128  Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
129           35                  40                  45
131  Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
132       50                  55                  60
134  Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
135   65                  70                  75                  80
137  Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
138                   85                  90                  95
140  Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu
141              100                 105                 110
143  Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
144          115                 120                 125
146  Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
147      130                 135                 140
149  Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
150  145                 150                 155                 160
152  Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
153                  165                 170                 175
155  Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
156              180                 185                 190
158  Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
159          195                 200                 205
161  Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
162      210                 215                 220
164  Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
165  225                 230                 235                 240
167  Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
168                  245                 250                 255
170  Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
171              260                 265                 270
173  Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
174          275                 280                 285
176  Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
177      290                 295                 300
179  Asn Pro Thr Leu Asp
180  305
183 <210> SEQ ID NO: 3
184 <211> LENGTH: 30
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Description of Artificial Sequence:
190       Oligonucleotide metAfw
192 <400> SEQUENCE: 3
193  gatcccatgg ctccttttag tcattcttat                                    30
196 <210> SEQ ID NO: 4
197 <211> LENGTH: 36
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
```

RAW SEQUENCE LISTING DATE: 07/03/2006
PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:52

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

201 <220> FEATURE:
202 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
203 metArev
205 <400> SEQUENCE: 4
206 gatcgagctc agtactatta atccagcgtt ggattc 36
209 <210> SEQ ID NO: 5
210 <211> LENGTH: 33
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
216 GAPDHfw
218 <400> SEQUENCE: 5
219 gtcgacgcgt gaggcgagtc agtcgcgtaa tgc 33
222 <210> SEQ ID NO: 6
223 <211> LENGTH: 42 n=1:1:1:1 mixture of A,T,C and G.
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
229 GAPDHrevII
231 <400> SEQUENCE: 6
232 gaccttaatt aagatctcat atgttccacc agctatttgt ta 42
235 <210> SEQ ID NO: 7
236 <211> LENGTH: 37
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
242 metAfw2
244 <400> SEQUENCE: 7
245 catggctcct tttagtcatt cttatattct aacgtag 37
248 <210> SEQ ID NO: 8
249 <211> LENGTH: 47
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
255 metArev2
257 <400> SEQUENCE: 8
258 acgcgtatgc atccagagct cagtactatt aatccagcgt tggattc 47
261 <210> SEQ ID NO: 9
262 <211> LENGTH: 25
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
268 metAmutfw1
270 <400> SEQUENCE: 9

RAW SEQUENCE LISTING DATE: 07/03/2006
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Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

W--> 271 **nnncagatca cgccatacga tctac** 25
274 <210> SEQ ID NO: 10
275 <211> LENGTH: 23
276 <212> TYPE: DNA
277 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
280 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
281 metAmutrev1
283 <400> SEQUENCE: 10
284 gacgtaatag ttgagccagt tgg 23
287 <210> SEQ ID NO: 11
288 <211> LENGTH: 24
289 <212> TYPE: DNA
290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:
293 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
294 metAmutfw2
296 <400> SEQUENCE: 11
W--> 297 **nnngtttga ctgtaactgg tgcg** 24
300 <210> SEQ ID NO: 12
301 <211> LENGTH: 21
302 <212> TYPE: DNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
307 metAmutrev2
309 <400> SEQUENCE: 12
310 aaagttctga tcctgaatat c 21

P/s Explain 'n' on line 2237. See pg-7 for Error Explanation..

Same Error

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/03/2006
PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:53

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 1,2,3
Seq#:11; N Pos. 1,2,3

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:1; Line(s) 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43
Seq#:1; Line(s) 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
Seq#:1; Line(s) 64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83
Seq#:1; Line(s) 84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102
Seq#:1; Line(s) 103,104,105,106,107,108,109,110,111,112,114,115,116
Seq#:2; Line(s) 117,118,119,120,121,122,123,124,125,126,127,128,129,130,131
Seq#:2; Line(s) 132,133,134,135,136,137,138,139,140,141,142,143,144,145,146
Seq#:2; Line(s) 147,148,149,150,151,152,153,154,155,156,157,158,159,160,161
Seq#:2; Line(s) 162,163,164,165,166,167,168,169,170,171,172,173,174,175,176
Seq#:2; Line(s) 177,178,179,180,181,182,183
Seq#:3; Line(s) 184,185,186,187,188,189,190,191,192,193,194,195,196
Seq#:4; Line(s) 197,198,199,200,201,202,203,204,205,206,207,208,209
Seq#:5; Line(s) 210,211,212,213,214,215,216,217,218,219,220,221,222
Seq#:6; Line(s) 223,224,225,226,227,228,229,230,231,232,233,234,235
Seq#:7; Line(s) 236,237,238,239,240,241,242,243,244,245,246,247,248
Seq#:8; Line(s) 249,250,251,252,253,254,255,256,257,258,259,260,261
Seq#:9; Line(s) 262,263,264,265,267,268,269,270,271,272,273,274
Seq#:10; Line(s) 275,276,277,278,279,280,281,282,283,284,285,286,287
Seq#:11; Line(s) 288,289,290,291,293,294,295,296,297,298,299,300
Seq#:12; Line(s) 301,302,303,304,305,306,307,308,309,310,311,312,313

VARIABLE LOCATION SUMMARY DATE: 07/03/2006
PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:53

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

Error Explanation

Use of n's or Xaa's(NEW RULES):
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:9; N Pos. 1,2,3
Seq#:11; N Pos. 1,2,3

VERIFICATION SUMMARY DATE: 07/03/2006
PATENT APPLICATION: **US/10/530,843B** TIME: 11:58:53

Input Set : **A:\Co10217se.txt**
Output Set: **N:\CRF4\07032006\J530843B.raw**

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:271 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:9
L:271 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:9
L:271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:297 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:11
L:297 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:11
L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0